

**PATENT APPLICATION**

*Jfw*

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of

Shiro HIROTA et al.

Group Art Unit: 3748

Application No.: 10/088,476

Examiner: T. Nguyen

Filed: March 20, 2002

Docket No.: 112340

For: EXHAUST GAS PURIFICATION DEVICE

**RESUBMISSION OF INFORMATION DISCLOSURE STATEMENT**

Director of the U.S. Patent  
and Trademark Office  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

As requested by Examiner Nguyen, resubmitted herewith is the Information Disclosure Statement filed on June 25, 2004 in the application identified above to replace the copy apparently lost by the Patent Office. A copy of the Applicants' postcard receipt is enclosed.

Because the original submission included a check for payment of the 1.17(p) fee, no further fees are believed due.

Because a Notice of Allowance has been mailed, the Examiner is requested to promptly initial and return to the undersigned a copy of the subject Form PTO-1449. For the convenience of the Examiner, a copy of that form is attached.

Should there be any questions concerning this communication, please telephone the undersigned at the number set forth below.

Respectfully submitted,

James A. Oliff  
Registration No. 27,075

Stephen P. Catlin  
Registration No. 36,101

JAO:SPC/can  
Date: August 31, 2004

**OLIFF & BERRIDGE, PLC**  
**P.O. Box 19928**  
**Alexandria, Virginia 22320**  
**Telephone: (703) 836-6400**

|   |
|---|
| <p><b>DEPOSIT ACCOUNT USE<br/>AUTHORIZATION</b><br/>Please grant any extension<br/>necessary for entry;<br/>Charge any fee due to our<br/>Deposit Account No. 15-0461</p> |
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PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of

Shinya HIROTA et al.

Group Art Unit: 3748

Application No.: 10/088,476

Examiner: T. NGUYEN

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Docket No.: 112340

For: EXHAUST GAS PURIFICATION DEVICE

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

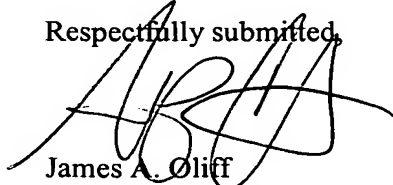
Sir:

Pursuant to 37 CFR §1.56, the attention of the Patent and Trademark Office is hereby directed to the references listed on the attached PTO-1449. Unless otherwise indicated herein, one copy of each reference is attached. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the references be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

- ☒ 1. This Information Disclosure Statement is being filed more than three months after the U.S. filing date and after the mailing date of a Final Rejection, Notice of Allowance, or other action that closes prosecution (e.g., Quayle Action), but before payment of the Issue Fee. Attached is our Check No. 155423 in the amount of \$180.00 in payment of the fee under 37 CFR §1.17(p). Please credit or debit Deposit Account No. 15-0461 as needed to ensure consideration of the disclosed information. Two duplicate copies of this paper are attached.
- ☒ a. I hereby certify that each item of information contained in this Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement.  
37 CFR §1.97(e)(1).
- ☒ 2. Each item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart application, and this communication was not received by any individual designated in §1.56(c) more than thirty days prior to the filing of this Information Disclosure Statement.
- ☒ 3. A concise explanation of the relevance of the non-English language references appears in the Appendix attached hereto.

- ☒ 4. English-language Abstracts of the non-English language references are attached hereto.
- ☒ 5. A computer-generated English translation of the following Japanese references has been obtained from the website of the Japanese Patent Office (<http://www.jpo.go.jp>), and is attached, but has not been reviewed for accuracy. See References 1 and 2.

Respectfully submitted,



James A. Oliff  
Registration No. 27,075

Stephen P. Catlin  
Registration No. 36,101

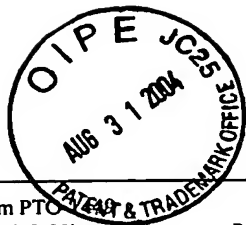
JAO:SPC/eks

Date: June 25, 2004

**OLIFF & BERRIDGE, PLC**  
**P.O. Box 19928**  
**Alexandria, Virginia 22320**  
**Telephone: (703) 836-6400**

**DEPOSIT ACCOUNT USE  
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Sheet 1 of 1

|   |   |  |            |                               |       |              |
|---|---|--|------------|-------------------------------|-------|--------------|
| Form PTO-170 (REV. 8-83)<br><b>PATENT &amp; TRADEMARK OFFICE</b><br>US Dept. of Commerce<br><b>PATENT &amp; TRADEMARK OFFICE</b><br><br>INFORMATION DISCLOSURE STATEMENT<br><br>(Use several sheets if necessary)                           |   | ATTY DOCKET NO.<br>112340                |            | APPLICATION NO.<br>10/088,476 |       |              |
|   |   | APPLICANT(S)<br>Shinya HIROTA et al.     |            |                               |       |              |
|   |   | FILING DATE<br>March 20, 2002            |            | GROUP<br>3748                 |       |              |
| U.S. PATENT DOCUMENTS   |   |  |            |                               |       |              |
| EXAMINER<br>INITIAL   |   | DOCUMENT NUMBER                          | DATE       | NAME                          | CLASS | SUB<br>CLASS |
|   |   |  |            |                               |       |              |
|   |   |  |            |                               |       |              |
|   |   |  |            |                               |       |              |
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|   |   |  |            |                               |       |              |
|   |   |  |            |                               |       |              |
|   |   |  |            |                               |       |              |
| FOREIGN PATENT DOCUMENTS  |   |  |            |                               |       |              |
|   |   | DOCUMENT NUMBER                          | DATE       | COUNTRY                       | CLASS | SUB<br>CLASS |
|   | 1 | JP 7-269328 (w/Abstract & Translation)   | 10/17/1995 | JAPAN                         |       |              |
|   | 2 | JP 2000087736 (w/Abstract & Translation) | 03/28/2000 | JAPAN                         |       |              |
|   |   |  |            |                               |       |              |
|   |   |  |            |                               |       |              |
|   |   |  |            |                               |       |              |
| OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.)  |   |  |            |                               |       |              |
|   |   |  |            |                               |       |              |
|   |   |  |            |                               |       |              |
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|   |   |  |            |                               |       |              |
|   |   |  |            |                               |       |              |
| EXAMINER  |   |  |            | DATE CONSIDERED               |       |              |
| Examiner: Initial if citation considered, whether or not citation is in conformance with M.P.E.P. 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. |   |  |            |                               |       |              |

Date: June 25, 2004

Information List (Form 1)

|               |                                  |
|---------------|----------------------------------|
| US Serial No. | 10/088,476 and<br>Please advise  |
| Our ref:      | TYT-J759-US and<br>TYT-J759-US-1 |

The following is a List of References provided by the Applicant. Please file an Information Disclosure Statement using this information.

| Document Number  | Publication Date | Brief Explanation or Page(s) & Line(s) of Related Part(s)   |
|--|------------------|---|
| Unexamined JP<br>Patent Publication<br>(Kokai)<br>No. 2000-87736 | March 28, '00    | Three way catalysts 6C and 6B and NOx catalyst 6A are arranged in an exhaust pipe 3. NOx catalyst comprises Ba and Pt carried on $Al_2O_3$ . When a temperature of the NOx catalyst is higher than a predetermined temperature and an atmosphere in the NOx catalyst is lean, an amount of the gas flowing into the NOx catalyst is increased by fully opening an idle speed control valve 13 and an air bypass valve 14 and by supplying air from air supply devices 15 and 16 into exhaust gas. By increasing the amount of the gas flowing into the NOx catalyst, the NOx catalyst is cooled and the temperature thereof is decreased. |
| Unexamined JP<br>Patent Publication<br>(Kokai)<br>No. 7-269328   | Oct. 17, '95     | Fig. 3 shows an engine comprising a particulate filter 105 according to the first embodiment.<br><br>Fig. 12 shows an engine comprising a particulate filter 105 according to the second embodiment.  |

A. AOKI, ISHIDA & ASSOCIATES

Information List (Form 1)

|               |                                  |
|---------------|----------------------------------|
| US Serial No. | 10/088,476 and<br>Please advise  |
| Our ref:      | TYT-J759-US and<br>TYT-J759-US-1 |

The following is a List of References provided by the Applicant. Please file an Information Disclosure Statement using this information.

| Document Number  | Publication Date | Brief Explanation or Page(s) & Line(s) of Related Part(s)   |
|--|------------------|---|
| Unexamined JP<br>Patent Publication<br>(Kokai)<br>No. 7-269328 | Oct. 17, '95     | <p>When it is judged that filter 105 should be regenerated, a heater 110 is activated to burn particulates trapped in filter 105. Before heater 110 is activated, a valve 106 is closed and a valve 108 is opened to decrease an amount of exhaust gas flowing into filter 105, thereby avoiding deterioration of filter 105 by heat generated from burning of the trapped particulates.</p> <p>According to the second embodiment, during the regeneration of filter 105, air is introduced from an air pump 116 into exhaust gas flowing into filter 105 in order to supply enough oxygen to burn the trapped particulates.</p> |

A. AOKI, ISHIDA & ASSOCIATES

**PTO RECEIPT FOR FILING OF PAPERS**

► **Mail Room (Regular Delivery)**

**The following papers have been filed:**

Information Disclosure Statement, Form PTO-1449, 2 references, 2 abstracts, 2 translations,  
Check No. 155423 (\$180.00)

**Name of Applicant:** Shinya HIROTA et al.

**Serial No.:** 10/088,476

**Atty. File No.:** 112340

**Title (New Cases):**

**Sender's Initials:** JAO:SPC/eks



74/10

**PATENT OFFICE DATE STAMP**

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AND RETURNED BY MESSENGER**

**Oliff & Berridge, PLC  
277 S. Washington Street, Suite 500, Alexandria, Virginia 22314**